REMARKS

Present Status of the Application

Applicant appreciates that the Office Action considers claims 17, 19, 20, 30, 32 and 33 to be allowable.

The Office Action rejects claims 1-16, 18, 21-29 and 31under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (U.S. Patent 5,781,242, hereinafter Kondo) in view of Andrews et al. (U.S. Patent 5,572,695, hereinafter Andrews). Claims 1-33 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Claim Rejections under 35 USC 103

The Office Action rejects claims 1-16, 18, 21-29 and 31under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. in view of Andrews. Applicant respectfully traverses the rejections for at least the reasons set forth below.

The present invention is directed to the method of buffer management and task scheduling for 2D data transforming, or 2D DCT. The present invention uses two mapping schemes in alternative manner for reading and writing the data, which are transformed in two dimensions.

It should be noted that the mapping schemes are not the mapping table. Actually, when data are written into or read out from the buffer, the transforming data sequence has been set (i.e. page 6, lines 7-10), and automatically guarantees the output sequence required by 2D-DCT operation (page 6, lines 16-19).

In other words, the mapping scheme of the present invention is to define the structure of

physical address but not the look-up table between the logical address and the physical address. The present invention does not physically include a lookup table in data transformation, such as 2D DCT. One knows that the physical address and the physical address are needed to transformed by a mapping table between the processors and the memory device. However, that ***mapping table is not the claimed mapping schemes.*** In other words, *the present invention uses the two* ***mapping schemes*** *to directly access the memory without using the mapping table.*

In re Kondo, as noted by the Office Action in page 2, Kondo fails to disclose or suggest the two mapping schemes. The Office Action then refers to Andrews.

In re Andrews, the Office Action in "***Response to Arguments***" refers to the logic (38 and 46) of Andrew in combination with Kondo for rejections. Applicant respectfully disagrees.

In Fig. 3 of Andrew, the system is designed to allow the two DSP blocks 30, 32 to share a single data RAM (DRAM) 33 (col. 5, lines 57-67). The DSP blocks respectively have the processor 34 with logic 38 and the processor 42. In DSP block 30 (col. 6, lines 1-11), the logic 38 is used to produce a 17 bit physical address, which is input to the MUX 40 for accessing the DRAM 33. Likewise (col. 6, lines 12-27), the DSP block 32 is similar to the DSP block 30. Andrew also discloses the operation (col. 6, lines 45-57) about how to share the single DRAM 33 via the MUX 40.

In other words, Andrew discloses the two DSP block 30 and 32 to share the single DRAM 33. The two DSP blocks 30 and 32 are similar, in which the two logics 38 and 46 are also

similar.

Therefore, Andrew does not teach, as recited in claimed invention, the two mapping schemes, which satisfies requirement of data sequence of the 2-D data transforming, such as 2D-DCT. Even in combination of Kondo with Andrew, the claimed features are still not disclosed by prior art.

For at least the foregoing reasons, Applicant respectfully submits that independent claims 1, 6, and 21 patently define over the prior art references, and should be allowed. For at least the same reasons, dependent claims 2-5, 7-20, and 22-33 patently define over the prior art references as well, wherein claims 17, 19, 20, 30, 32 and 33 have been considered to be allowable.

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CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-33 of the invention patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,
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